

Phoenix Goodyear
(Litchfield)
31253
0217-00087

86-02

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8 UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
9 REGION 9

10 In the Matter of) ORDER
11 UNIDYNAMICS/PHOENIX, INC.) Docket No. 86-02
12 (GOODYEAR, ARIZONA),)
13 Respondent.)
14 Proceeding Under)
15 Section 3013 of the)
Resource Conservation and)
Recovery Act (42 U.S.C. §6934))

16 I

17 JURISDICTION

18 The following Order is issued on this date to Unidynamics/
19 Phoenix, Inc., 1000 N. Litchfield Road, Goodyear, Arizona
20 (hereinafter referred to as Respondent), pursuant to the
21 authority vested in the Administrator of the United States
22 Environmental Protection Agency (EPA) under §3013 of the Resource
23 Conservation and Recovery Act (RCRA); 42 U.S.C. §6934, and
24 redelegated to the Director, Toxics and Waste Management Division,
25 EPA, Region 9. Notice of issuance of this Order has been given
26 to the State of Arizona.

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1 II

2 FINDINGS OF FACT

- 3 1. Respondent is the current owner and operator of a facility
4 located at 1000 N. Litchfield Road in Goodyear, Arizona
5 (hereinafter referred to as facility).
- 6 2. Respondent has engaged in the storage, treatment and
7 disposal of hazardous wastes.
- 8 3. On April 3, 1978, the EPA performed an inspection of the
9 facility pursuant to the Clean Air Act. The inspection
10 revealed that Respondent used a substantial amount of TCE
11 (estimated at 1180 gallons/year) and other solvents. An
12 inspection report was prepared after a review of Respon-
13 dent's records and a physical inspection of Respondent's
14 facility. The inspection report noted that TCE was disposed
15 of by spraying on Respondent's land and was used to
16 eradicate weeds. The report also indicated that waste
17 solvents were disposed of in dry wells. In addition, the
18 inspection report contained a rough calculation of the gross
19 solvent disposal rate, which was estimated at 3 gallons per
20 day. The report further stated that prior to 1978 nearly
21 all waste solvents were disposed of on-site. A small portion
22 was recycled, but most was sprayed on site or poured down
23 the dry wells.
- 24 4. On June 2, 1978, Respondent provided information to
25 Maricopa County Health Department stating that in 1977
26 Respondent used the solvents listed below in the quantities
27 specified. Respondent also stated that the majority of the

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1 solvents used in 1977, once spent, were disposed of via
2 on-site dry wells:

3	<u>Solvent</u>	<u>Quantity</u>
4	TCE	1180 gal.
5	Isopropyl Alcohol	660 gal.
6	Toluene	60 gal.
	Methyl Ethyl Ketone	220 gal.
	Acetone	165 gal.

7 5. On July 15, 1980, an EPA inspection of Respondent's
8 facility documented the use of eleven dry wells and two
9 unlined oxidation ponds for on-site waste disposal. The dry
10 wells are 30 to 35 feet deep, approximately 30 inches in
11 diameter, and filled with rocks . At the time of the
12 inspection, one of the Respondent's representatives stated
13 that all but two or three of the dry wells have been in
14 existence since 1963. Most of the wells, according to the
15 inspection report, received effluent from settling basins.
16 Three of the wells, however, received untreated waste
17 solvents. The report estimated Respondent's TCE usage at
18 1,000 gallons/year.

19 6. On January 7, 1981, Respondent submitted to EPA a RCRA
20 Hazardous Waste Part A Permit Application. The following
21 hazardous wastes, some of which are halogenated and non-
22 halogenated solvents, were listed in the Hazardous Waste
23 Part A Permit Application as being either treated, stored,
24 or disposed at respondent's facility:

25	K054	Chrome Waste
26	D002	Corrosive Waste
27	D001	Ignitable Waste
	D003	Reactive Waste
	P012	Arsenic Trioxide

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P029	Copper Cyanide
P030	Cyanides
P031	Cyanogen
P105	Sodium Azide
P106	Sodium Cyanide
U002	Acetone
U012	Aniline
U019	Benzene
U021	Benzidine
U032	Calcium Chromate
U044	Chloroform
U069	Di-n-Butyl Phthalate
U112	Ethyl Acetate
U122	Formaldehyde
U154	Methanol
U159	Methyl Ethyl Ketone
U169	Nitrobenzene
U220	Toluene
U223	Toluene Disocyanate
U228	Trichloroethene, Trichloroethylene, or TCE
U080	Dichloromethane

7. On June 8, 1981, Respondent submitted to EPA a Notification of Hazardous Waste Site pursuant to §103(c) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §9603(c). The following hazardous wastes, classified as solvents, were reported by Respondent as being handled at the facility beginning in 1963:

U002	Acetone
U154	Methanol
U159	Methyl Ethyl Ketone
U220	Toluene
U226	1,1,1-Trichloroethane
U228	Trichloroethene, Trichloroethylene, or (TCE)

The notification also reported that Respondent handled unspecified acids beginning in 1963.

8. On June 22, 1982, the Arizona Department of Health Services sampled the City of Goodyear Well #4 which is located on Respondent's property. The analysis showed a TCE concentration of 20.1 ppb.

1 9. On September 3, 1982, EPA sampled wells in the Goodyear
2 area. The analysis of the sample taken from the City of
3 Goodyear well #4 on Respondent's property revealed a TCE
4 concentration of 32 ppb.

5 10. On September 2, 1982, Respondent submitted information in
6 response to EPA's request for information pursuant to
7 Section 104 of the Comprehensive Environmental Response,
8 Compensation and Liability Act (CERCLA), 42 U.S.C. §9604,
9 and Section 3007 of RCRA, 42 U.S.C. §6927, which stated the
10 following:

11 A. Spent TCE has been generated at a rate of approximately
12 1000 gallons/year since 1963.

13 B. Eleven dry wells and two oxidation ponds have been used
14 for on-site waste disposal. Neither of the ponds is
15 lined. All but two or three of the dry wells have been
16 used since 1963. Three of the dry wells have had waste
17 dumped directly into them (i.e. without first passing
18 through an oxidation pond).

19 C. Prior to 1978, nearly all waste solvents were disposed
20 of on-site. A small percentage of TCE was recovered and
21 reclaimed by Southwest Solvents of Chandler, Arizona.
22 The remainder was sprayed on site land as a weed killer
23 or poured into the dry wells.

24 D. A total of 5-10 gallons/week of Methyl Ethyl Ketone,
25 Acetone, Isopropyl Alcohol, and Diacetone Alcohol was
26 dumped directly into four dry wells.

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11. As a result of EPA Administrative Order 84-03 issued on March 27, 1984, the Respondent undertook efforts to characterize the ground water quality and surface characteristics in the area of the facility. The ground water in the area of the facility flows from the southeast to the northwest. The position of the monitoring well in relation to the dry wells determines if the monitoring well is upgradient or downgradient. The wells were installed by the Respondent in the Upper Alluvial Unit which is divided into three water bearing zones: the shallow subunit A is from 40 to 150 feet below ground surface; the intermediate subunit B is from 120 to 200 feet below ground surface; and the deep subunit C is from 190 to 360 feet below ground surface. The following levels of trichloroethylene present in the UAU beneath the facility are presented in the EPA Phase I Data Summary/ Report dated January 17, 1986:

<u>Monitoring Well</u>	<u>TCE Concentration (sampling date)</u>	
MW-1-shallow/upgradient	2.1 ppb	(1/8/85)
MW-2-shallow/downgradient	83,000 ppb	(1/8/85)
MW-3-shallow/downgradient	26,000 ppb	(1/8/85)
MW-4-shallow/downgradient	55,000 ppb	(1/8/85)
MW-5-intermediate/downgradient	not detected	
MW-6-deep/downgradient	3.6 ppb	(4/30/85)
MW-7-shallow/downgradient	19,000 ppb	(5/8/85)
MW-8-shallow/downgradient	1,600 ppb	(6/1/85)
MW-9-shallow/upgradient	58 ppb	(5/6/85)

12. Spent halogenated and non-halogenated solvents, including TCE, are hazardous substances as defined by §101(14) of

CERCLA, 42 U.S.C. §9601(14) and are hazardous wastes as defined by §1004(5) of RCRA, 42 U.S.C. §6903(5).

13. TCE is used primarily as a metal degreasing agent and is slightly soluble in water. TCE is an anesthetic which depresses the central nervous system. TCE has been demonstrated to cause cancer in animals and it has also been shown to be mutagenic in certain laboratory tests. Short term exposure to TCE has been reported to produce liver and kidney damage and central nervous system disturbances in mammals, including humans.
14. EPA has determined in its ambient water quality criteria that 2.7 parts per billion (ppb) of TCE would be expected to produce one additional case of cancer in a population of 1,000,000 [F.R./Vol. 45, No. 231/November 28, 1980/p. 79341]. TCE has been detected in the ground water beneath the facility in concentrations as high as 83,000 ppb. This concentration is more than 10 times the level determined by EPA to pose a risk of one excess cancer incident in a population of 1,000,000.
15. The State of Arizona has established an action level of 5 ppb for TCE found in drinking water. Using this guideline, the State has requested the closure of drinking water wells in which the concentration of TCE exceeds 5 ppb.
16. The aquifer system which was tapped by City of Goodyear well #4, located on Respondent's property, is the primary source of water for approximately 5,250 people in the Goodyear-Avondale area.

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III

DETERMINATION

Based upon the foregoing Findings of Fact, the Director, Toxics and Waste Management Division, EPA, Region 9 has determined that hazardous wastes have been stored, treated, and disposed of at Respondent's Litchfield facility and that the release of such wastes from Respondent's facility has occurred and may present a substantial hazard to human health or the environment.

EPA has further determined that Respondent is a current owner and operator responsible for conducting the actions ordered herein, which are necessary to ascertain the nature and extent of the hazard.

IV

ORDER

Based upon the foregoing Determinations and Findings of Fact, Respondent is hereby ordered, pursuant to §3013 of RCRA, as amended, 42 U.S.C. 6934, to begin all work stated in its proposal to continue the Remedial Investigation [Proposal] dated November 12, 1985, as amended by a letter dated December 6, 1985, within fifteen (15) days of the effective date of this Order. The final location of any monitoring wells to be installed during the remaining investigation shall be discussed with EPA before installation. All monitoring wells at the facility shall be sampled for the priority pollutant compounds within 45 days of receipt of this order. EPA will contact UPI to coordinate this sampling effort. All new wells shall be added to the existing quarterly sampling effort. Upon EPA's review of the data

1 generated by the Proposal, additional work may be required of the
2 Respondent by EPA in a supplemental Order.

3 Respondent will make all reasonable efforts to obtain access
4 to and use of any off-site areas. Respondent assumes full
5 responsibility for any claims arising from the activities
6 conducted by Respondent, its representatives, or consultants on
7 third-party property in connection with this Order.

8 A letter confirming that work identified in the Proposal
9 has begun [herein referred to as letter] must be submitted by
10 Respondent to Jeff Rosenbloom, Environmental Protection Agency,
11 at the address listed below, within twenty days of the date of
12 this Order.

13 Respondent shall provide EPA with copies of all charts,
14 maps, letters, memoranda, invoices, shipping manifests or other
15 records or documents relevant to the subject matter of this Order
16 as requested by EPA or which are required by RCRA, or any other
17 applicable law, to be provided to EPA.

18 Respondent shall complete all work, including sample
19 analyses, as set forth in the Proposal within six months after
20 receipt of this Order. Provided, however, that to the extent
21 delays occur as a result of factors beyond the Respondent's
22 control, EPA and the Respondent shall negotiate appropriate
23 modifications of this date. Respondent shall submit to EPA
24 monthly status reports describing activities performed during
25 that month including, but not limited to, a description of any
26 well drilling, soil boring, sample collection, sample analysis,
27 water level measurement, and engineering or geologic analysis.
28 These monthly reports are to be sent to EPA within one month of

1 the completion of the previous month's tasks.

2 EPA reserves the right, after reviewing the information
3 gathered pursuant to this Order, and any other relevant data, to
4 require UPI to carry out such additional investigations and/or
5 such response actions as may be appropriate, pursuant to applic-
6 able statutory authority.

7 UPI shall provide access to the facility to EPA, EPA's
8 contractors, state agencies, and their contractors at all reason-
9 able times. The Respondent shall permit such persons to be
10 present and to move freely in the area in which any work is being
11 conducted at all times when work is being conducted pursuant to
12 this Order.

13 This Order shall be binding upon the Respondent, its
14 trustees, receivers, assigns and successors in interest. The
15 Respondent shall undertake to notify any prospective purchasers
16 of the facility or any portion thereof of the existence of this
17 Order, and shall notify EPA in writing that such notice has been
18 given prior to transfer of title of the property.

19 All activities carried out by the Respondent pursuant to
20 this Order shall be in full compliance with all applicable
21 Federal, State, and local laws and regulations.

22 Respondent, by consenting to this Order, does not waive any
23 rights or defenses it might otherwise have under applicable
24 statutory authority to any future orders, including supplemental
25 orders, issued by EPA with respect to this site.

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V

OPPORTUNITY TO CONFER

Under the provisions of RCRA, Respondent may confer with EPA at any time prior to submittal of the letter. At any conference held pursuant to Respondent's request, Respondent may appear in person and by attorney or other representatives for the purpose of presenting any objections, defenses or contentions which Respondent may have regarding this Order. Any objection, defense or contention which Respondent may make should be in writing, signed and forwarded to the contact person named below on or before the date on which Respondent is required to submit the letter. The opportunity to confer does not alter the requirement for submittal of the letter within twenty days of the effective date of this Order.

VI

LIABILITY

If EPA determines that Respondent is not able to conduct the activities required by this Order, or if actions carried out are deemed unsatisfactory, then EPA may conduct such actions deemed reasonable by EPA to ascertain the nature and extent of the hazard. Respondent may then be ordered to reimburse EPA for the costs of such activity pursuant to §3013(d) of RCRA, 42 U.S.C. §6934(d). In the event Respondent fails or refuses to comply with the terms and provisions of this Order, EPA may commence a civil action, pursuant to § 3013(e) of RCRA, 42 U.S.C. §6934(c) to require compliance with such Order and to assess civil penalties not to exceed \$5,000 for each day that Respondent fails or refuses to comply. It is so ordered on this 5 day of March,

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1986. This order shall become effective immediately.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Original Signed By:

BY: Harry Seraydarian
Director, TOXICS & WASTE MANAGEMENT DIVISION

Contact person:

Jeff Rosenbloom (T-4-2)
Environmental Protection Agency
215 Fremont Street
San Francisco, California 94105
Telephone: (415) 974-7513